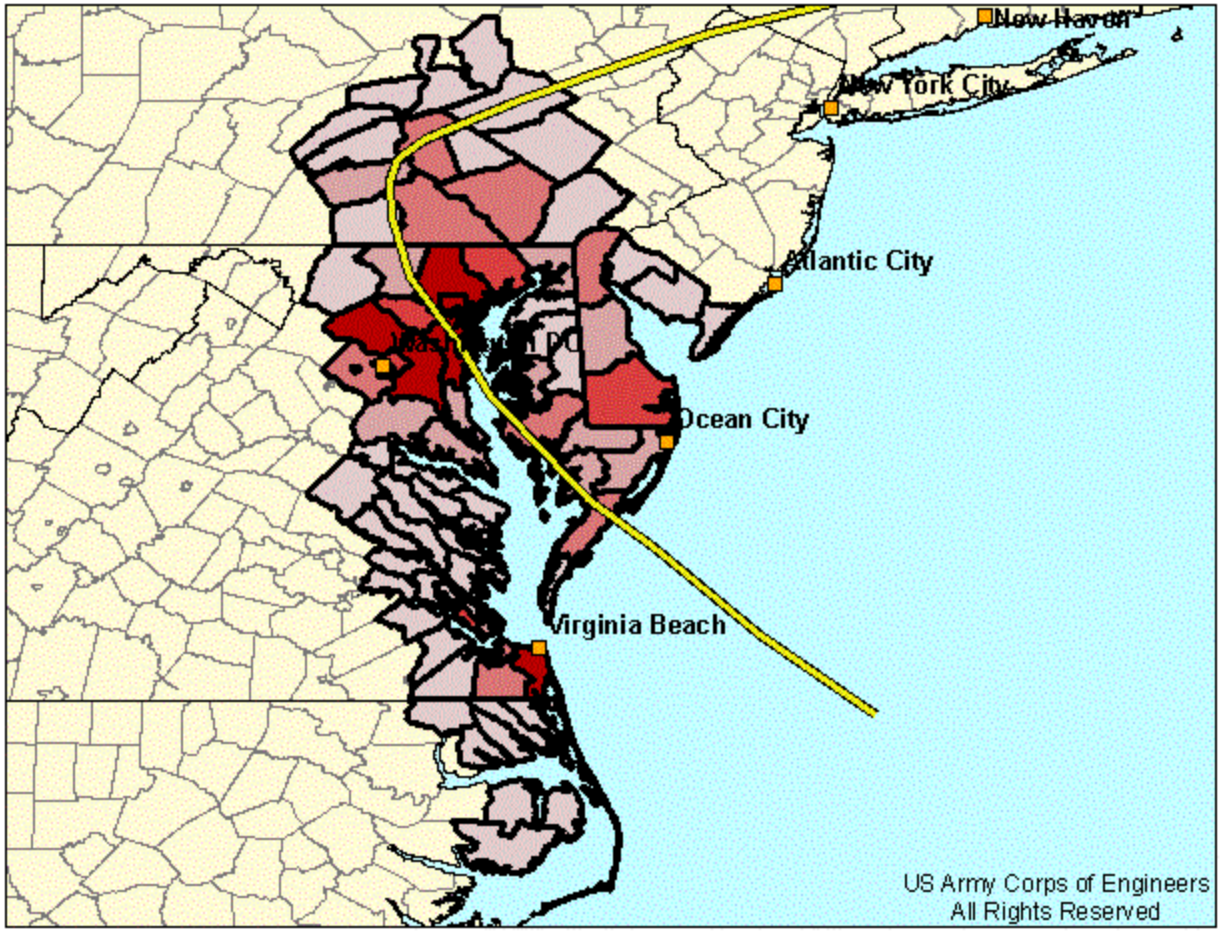
US Army Corps of Engineers

Hurricane MD#2 Debris Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

MD - 11,416,000 Yards
VA - 5,034,000 Yards
PA - 1,620,000 Yards
DE - 1,449,000 Yards
DC - 727,000 Yards
NC - 154,000 Yards
NJ - 100,000 Yards

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC (0830 EDT 05/16/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane MD#2 Debris Model

Generated By:
Siemsen, LRL 0900 EDT 05/16/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Debris Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Delaware		Kent	175,000
		New Castle	283,000
		Sussex	991,000
Delaware	1,449,000		
District of Columbia		District of Columbia	727,000
District of Columbia	727,000		
Maryland		Anne Arundel	1,421,000
		Baltimore	2,243,000
		Baltimore City	1,871,000
		Calvert	216,000
		Caroline	70,000
		Carroll	211,000
		Cecil	113,000
		Charles	186,000
		Dorchester	251,000
		Frederick	26,000
		Harford	521,000
		Howard	656,000
		Kent	43,000
		Montgomery	1,175,000
		Prince George's	1,372,000
		Queen Anne's	100,000
		Somerset	174,000
		St Mary's	217,000
		Talbot	110,000
		Wicomico	246,000
		Worcester	194,000
Maryland	11,416,000		

State	Yards per State	County	Yards per County
New Jersey		Cape May	72,000
		Cumberland	12,000
		Salem	16,000
New Jersey	100,000		
North Carolina		Camden	14,000
		Currituck	33,000
		Dare	47,000
		Gates	2,000
		Hyde	2,000
		Pasquotank	47,000
		Perquimans	5,000
		Tyrrell	4,000
North Carolina	154,000		
Pennsylvania		Adams	85,000
		Berks	2,000
		Chester	33,000
		Columbia	< 1,000
		Cumberland	192,000
		Dauphin	270,000
		Juniata	< 1,000
		Lancaster	372,000
		Lebanon	100,000
		Northumberland	39,000
		Perry	32,000
		Schuylkil	31,000
		Snyder	< 1,000
		York	464,000

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Sources:
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US Army Corps of Engineers

Hurricane MD#2 Debris Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Pennsylvania	1,620,000		
(continued)			
Virginia		Accomack	346,000
		Alexandria city	247,000
		Arlington	339,000
		Caroline	< 1,000
		Charles City	< 1,000
		Chesapeake city	264,000
		Essex	16,000
		Fairfax	491,000
		Falls Church city	18,000
		Gloucester	49,000
		Hampton City	194,000
		Isle Of Wight	27,000
		James City	79,000
		King And Queen	10,000
		King George	13,000
		King William	7,000
		Lancaster	29,000
		Mathews	25,000
		Middlesex	21,000
		New Kent	5,000
		Newport News city	949,000
		Norfolk City	356,000
		Northampton	37,000
		Northumberland	38,000
		Poquoson City	15,000
		Portsmouth city	143,000
		Richmond	11,000
		Suffolk City	72,000
		Surry	4,000

State	Yards per State	County	Yards per County
Virginia		Virginia Beach city	1,116,000
(continued)		Westmoreland	26,000
		Williamsburg city	14,000
		York	73,000
Virginia	5,034,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Hurricane MD#2 Debris Model

Generated By:
Siemsen, LRL 0900 EDT 05/16/2008

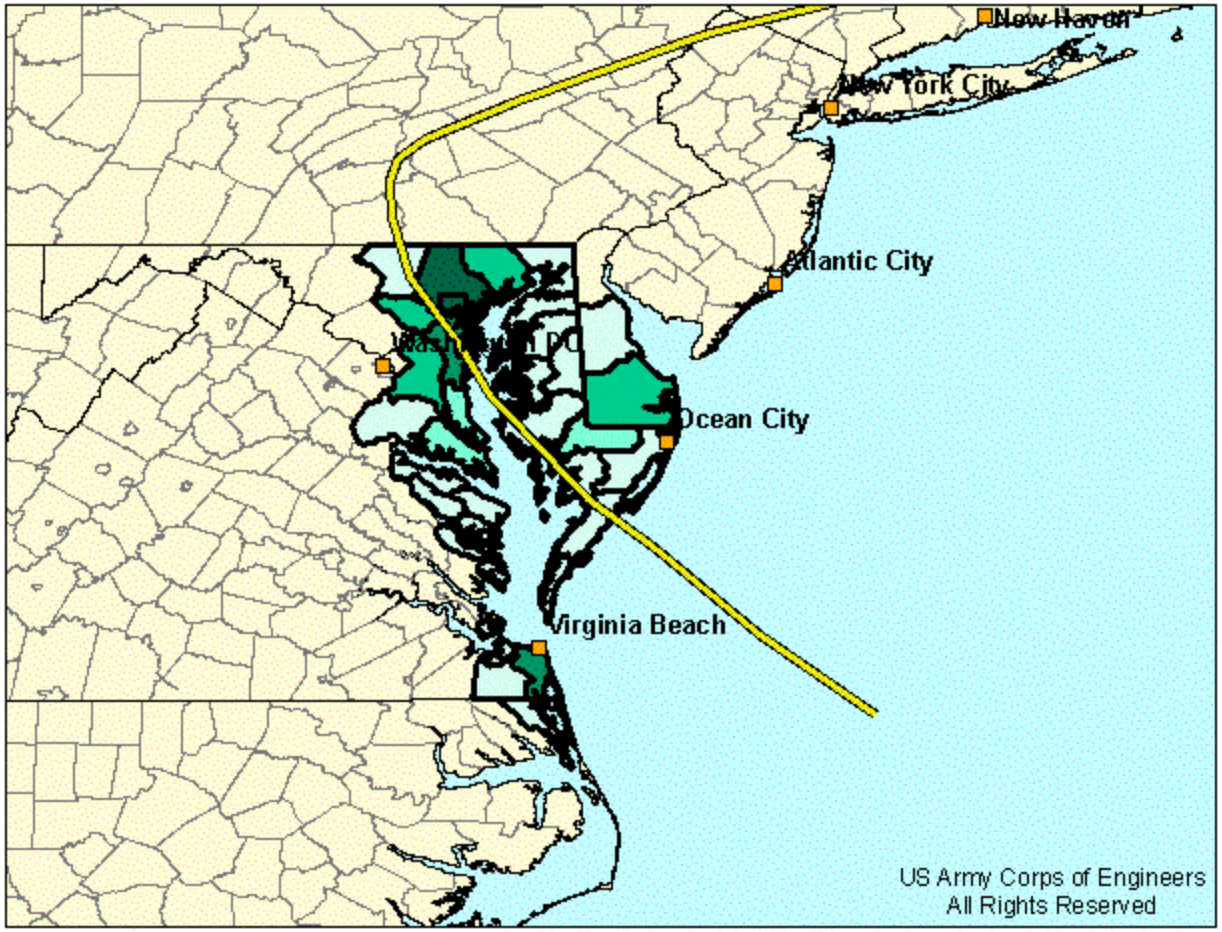
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Commodities Model

Landfall Plus About **12** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
MD – 54/108/216 Truckloads
VA – 11/21/42 Truckloads
DE – 4/8/15 Truckloads
NC – 1/1/1 Truckload

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC ***(0830 EDT 05/16/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane MD#2 Commodities Model	
Generated By: Siemsen, LRL 0900 EDT 05/16/2008	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 13

US Army Corps of Engineers

Hurricane MD#2 Commodities Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Delaware		Kent	2
		Sussex	13
Delaware	15		
Maryland		Anne Arundel	35
		Baltimore	53
		Baltimore City	43
		Calvert	6
		Caroline	3
		Carroll	2
		Cecil	1
		Charles	1
		Dorchester	3
		Harford	13
		Howard	14
		Kent	2
		Prince George's	14
		Queen Anne's	4
		Somerset	2
		St Mary's	6
		Talbot	3
		Wicomico	7
		Worcester	4
Maryland	216		
North Carolina		Currituck	1
North Carolina	1		
Virginia		Accomack	3
		Chesapeake city	1
		Hampton City	1

State	Truckloads per State	County	Truckloads per County
Virginia		Lancaster	1
(continued)		Mathews	1
		Middlesex	1
		Norfolk City	2
		Northampton	1
		Northumberland	1
		Richmond	1
		Virginia Beach city	28
		Westmoreland	1
Virginia	42		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane MD#2 Commodities Model

Generated By:
Siemsen, LRL 0900 EDT 05/16/2008

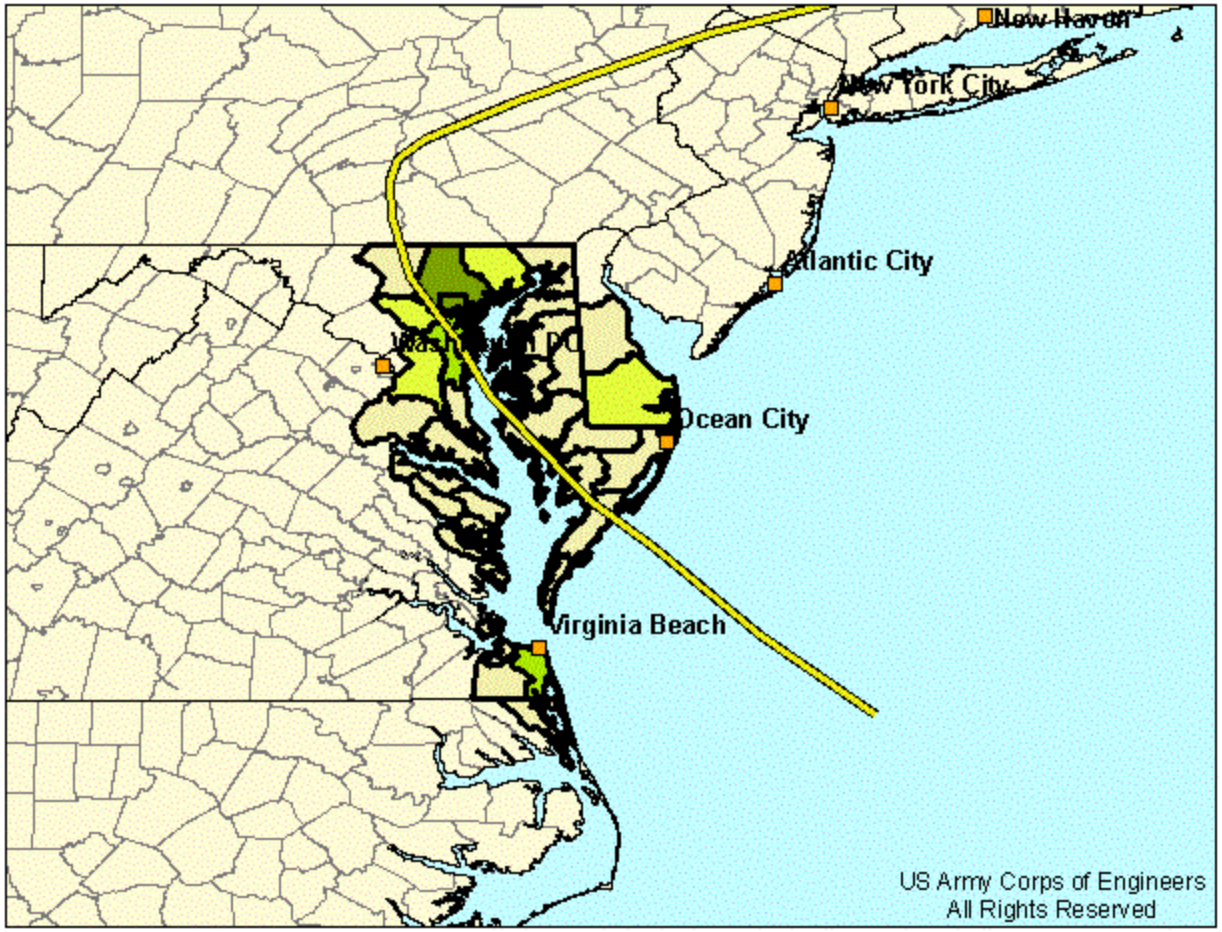
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Temporary Roofing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Maryland - 36,300
Virginia - 6,700
Delaware - 2,400

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC (0830 EDT 05/16/2008) forecast. Temporary roofing is based on 3% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane MD#2 Roofing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 6 of 13

US Army Corps of Engineers

Hurricane MD#2 Temporary Roofing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Delaware		Kent	300
		Sussex	2,100
Delaware	2,400		
Maryland		Anne Arundel	5,600
		Baltimore	9,400
		Baltimore City	7,600
		Calvert	1,000
		Caroline	400
		Carroll	400
		Cecil	< 100
		Charles	< 100
		Dorchester	700
		Harford	2,100
		Howard	2,300
		Kent	300
		Prince George's	2,200
		Queen Anne's	600
		Somerset	500
		St Mary's	900
		Talbot	500
		Wicomico	1,100
		Worcester	700
Maryland	36,300		
North Carolina		Currituck	< 100
North Carolina			
Virginia		Accomack	1,000
		Chesapeake city	< 100
		Hampton City	< 100

State	House Units per State	County	House Units per County
Virginia		Lancaster	200
(continued)		Mathews	200
		Middlesex	< 100
		Norfolk City	400
		Northampton	200
		Northumberland	200
		Richmond	< 100
		Virginia Beach city	4,500
		Westmoreland	< 100
Virginia	6,700		

Temporary roofing is based on 3% in CAT 1 and 6% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane MD#2 Roofing Model

Generated By:
Siemsen, LRL 0900 EDT 05/16/2008

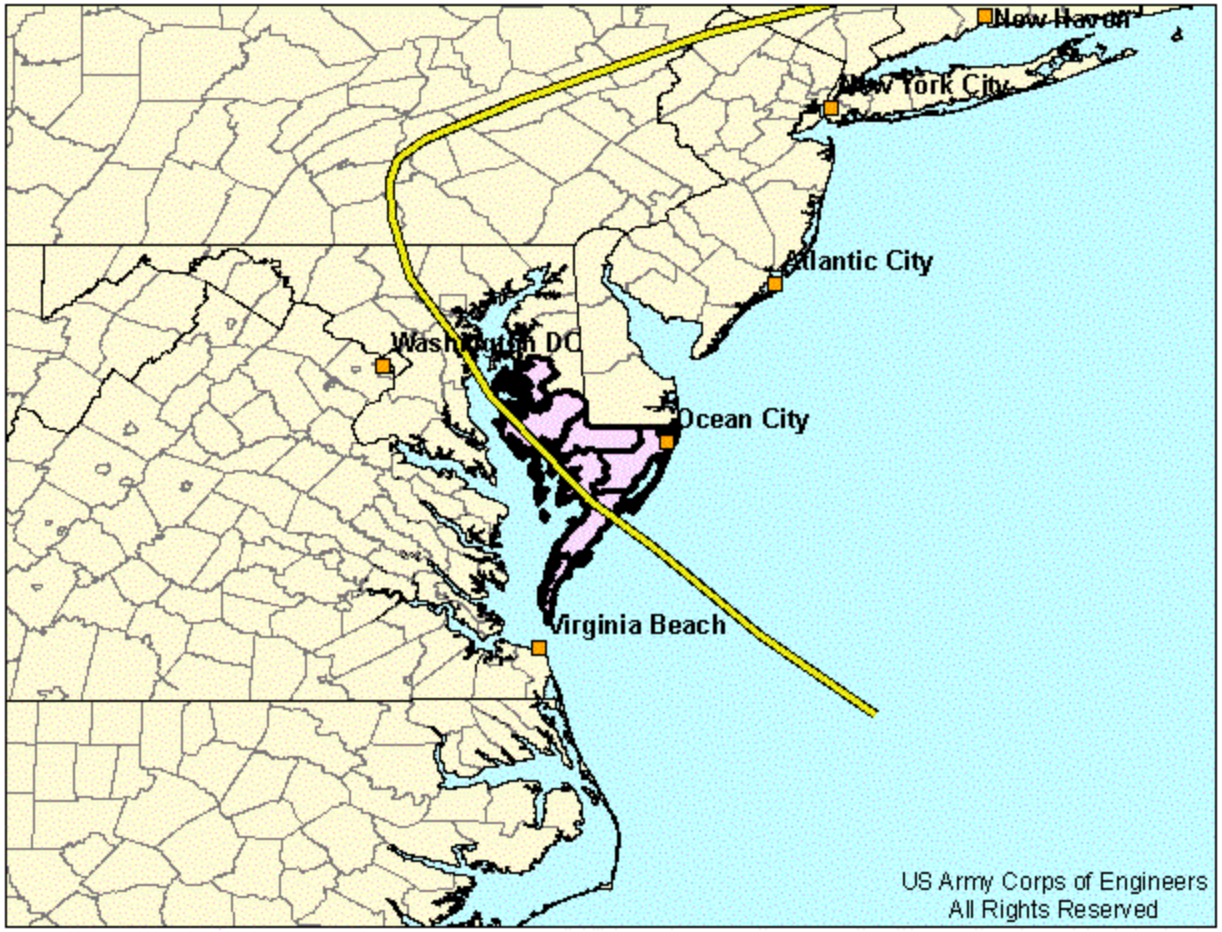
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Temporary Housing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Temporary Housing Model Results

Virginia - 200

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC (0830 EDT 05/16/2008) forecast. Temporary housing is based on 1% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane MD#2 Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 8 of 13

US Army Corps of Engineers

Hurricane MD#2 Temporary Housing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Maryland		Dorchester	< 100
		Somerset	< 100
		Talbot	< 100
		Wicomico	< 100
		Worcester	< 100
Maryland			
Virginia		Accomack	200
		Northampton	< 100
Virginia	200		

Temporary housing is based on 1% in CAT 2.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane MD#2 Housing Model

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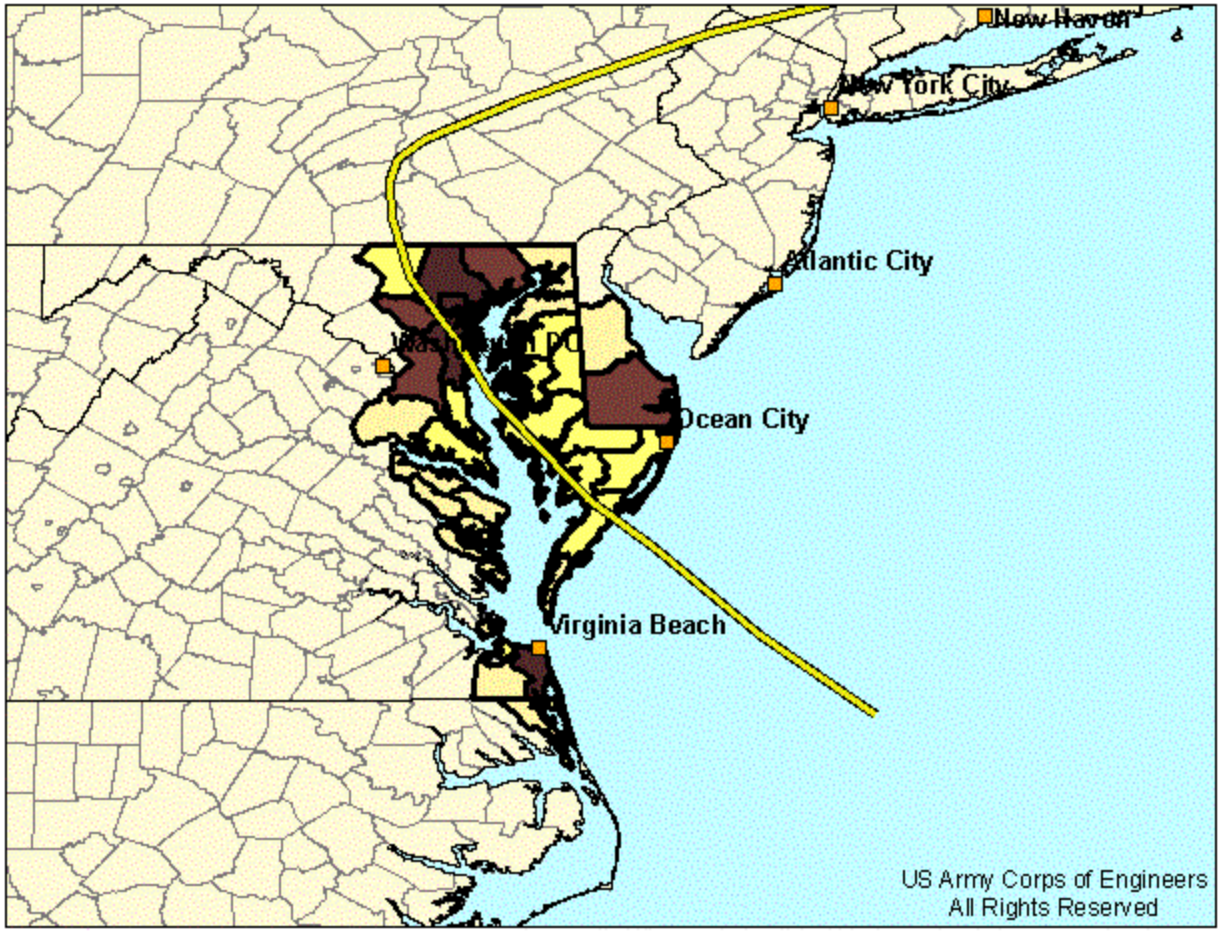
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Population Model

Landfall Plus About **12** Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Maryland - 3,058,000
Virginia - 538,000
Delaware - 208,000
North Carolina - 4,000

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC (0830 EDT 05/16/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2006 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane MD#2 Population Model	
Generated By: Siemsen, LRL 0900 EDT 05/16/2008	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 13

US Army Corps of Engineers

Hurricane MD#2 Population Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Delaware		Kent	25,000
		Sussex	183,000
Delaware	208,000		
Maryland		Anne Arundel	511,000
		Baltimore	786,000
		Baltimore City	636,000
		Calvert	89,000
		Caroline	33,000
		Carroll	30,000
		Cecil	< 1,000
		Charles	6,000
		Dorchester	32,000
		Harford	185,000
		Howard	200,000
		Kent	18,000
		Prince George's	201,000
		Queen Anne's	47,000
		Somerset	26,000
		St Mary's	79,000
		Talbot	37,000
		Wicomico	93,000
		Worcester	49,000
Maryland	3,058,000		
North Carolina		Currituck	4,000
North Carolina	4,000		
Virginia		Accomack	40,000
		Chesapeake city	5,000
		Hampton City	< 1,000

State	Population per State	County	Population per County
Virginia		Lancaster	10,000
(continued)		Mathews	8,000
		Middlesex	4,000
		Norfolk City	30,000
		Northampton	14,000
		Northumberland	13,000
		Richmond	< 1,000
		Virginia Beach city	412,000
		Westmoreland	2,000
Virginia	538,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

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Hurricane MD#2 Population Model

Generated By:
Siemsen, LRL 0900 EDT 05/16/2008

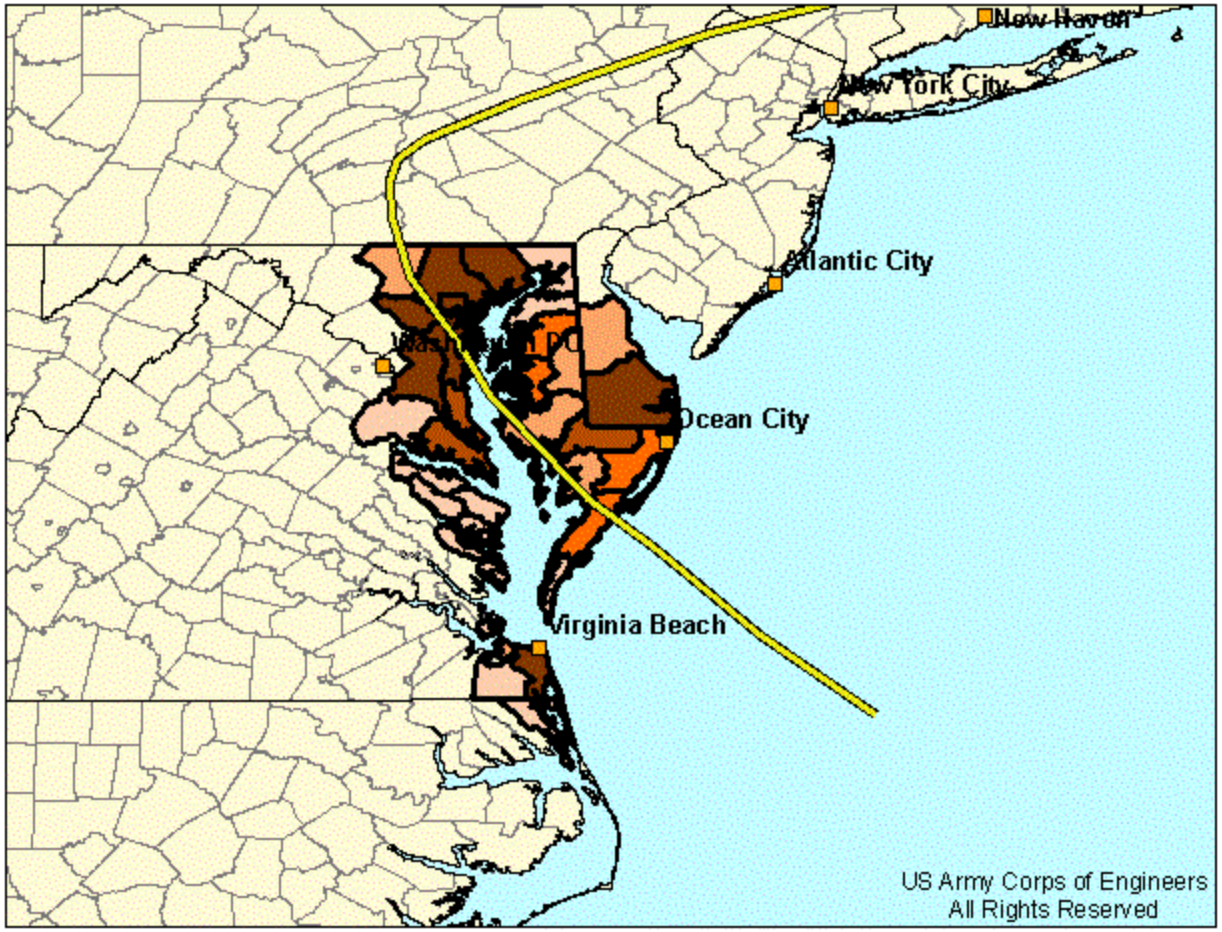
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane MD#2 Households Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



0 200 400 Miles

Post Landfall Households Model Results

Maryland - 1,175,000
Virginia - 203,000
Delaware - 79,000
North Carolina - 2,000

Model results per County on following page

This model is based on a Category 2 storm making landfall near Chincoteague, VA.

Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 2 storm making landfall near Chincoteague, VA. These projections are based on information from the NHC (0830 EDT 05/16/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2006 values).

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Sources: HURREVAC LRL-DEBRIS	Page 12 of 13

US Army Corps of Engineers

Hurricane MD#2 Households Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Delaware		Kent	9,000
		Sussex	70,000
Delaware	79,000		
Maryland		Anne Arundel	187,000
		Baltimore	313,000
		Baltimore City	252,000
		Calvert	31,000
		Caroline	13,000
		Carroll	11,000
		Cecil	< 1,000
		Charles	2,000
		Dorchester	14,000
		Harford	68,000
		Howard	75,000
		Kent	7,000
		Prince George's	73,000
		Queen Anne's	18,000
		Somerset	9,000
		St Mary's	29,000
		Talbot	16,000
		Wicomico	36,000
		Worcester	21,000
Maryland	1,175,000		
North Carolina		Currituck	2,000
North Carolina	2,000		
Virginia		Accomack	16,000
		Chesapeake city	2,000
		Hampton City	< 1,000

State	Households per State	County	Households per County
Virginia		Lancaster	5,000
(continued)		Mathews	4,000
		Middlesex	2,000
		Norfolk City	12,000
		Northampton	6,000
		Northumberland	6,000
		Richmond	< 1,000
		Virginia Beach city	150,000
		Westmoreland	< 1,000
Virginia	203,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

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Hurricane MD#2 Households Model

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